

IN THE CLAIMS

1. (CURRENTLY AMENDED). [As] An assembly for supporting a rail on a railroad tie, said assembly comprising:

an abrasion plate having an upper surface, and being constructed and arranged to fit on the railroad tie;

a rail pad having a lower surface and being constructed and arranged to fit on said abrasion plate with said lower surface facing and contacting said upper surface and to support the rail, said rail pad being separate and removable from said abrasion plate; and

[a plurality of clips arranged to secure the rail on top of said rail pad; and]

a locking mechanism adapted to prevent movement between said abrasion plate and said railroad pad, said locking mechanism including a plurality of bumps [disposed] uniformly distributed on one of said surfaces and a plurality of matching depressions uniformly distributed on the other of said surfaces.

2. (ORIGINAL). The assembly of claim 1 wherein said bumps have dimensions smaller than said depressions to allow relative adjustment there between.

3. (ORIGINAL). The assembly of claim 1 wherein said bumps are formed on said rail pad.

4. (ORIGINAL). The assembly of claim 1 wherein said abrasion plate has a lower surface with additional depressions.

5. (ORIGINAL). The assembly of claim 1 wherein said abrasion plate has a lower surface, and is formed with upper surface and lower surface depressions.

6. (ORIGINAL). The assembly of claim 5 wherein said upper surface depressions are offset laterally from said lower surface depressions.

7. (ORIGINAL). The assembly of claim 1 wherein said abrasion plate includes two opposed plate sides formed to wrap around the tie sides.

8. (ORIGINAL). The assembly of claim 7 wherein said plate sides each include a flat portion and an angled portion.

9. (ORIGINAL). A railroad assembly component for supporting a railroad track on a railroad tie, said component comprising:

an abrasion plate having a generally flat body and adapted for placement on the tie;

a rail pad arranged to be placed on top of said abrasion pad and to support the rail; and

a coupling adapted to couple said abrasion plate and said rail pad, said coupling

including a projection dependent on one of said abrasion plate and said rail pad, and a hole adapted to receive and capture said projection and formed on the other of said abrasion plate and said rail pad.

10. (CURRENTLY AMENDED). The assembly of claim 9 wherein said projection is integrally formed on and attached to said abrasion plate and said hole is formed in said pad.

11. (ORIGINAL). The assembly of claim 9 wherein said projection includes a stalk terminated with a head, said head being bigger than said hole.

12. (ORIGINAL). The assembly of claim 11 wherein said stalk has a cross-sectional dimension smaller than the cross-sectional dimension of the hole to allow some lateral play between said plate and said pad.

13. (ORIGINAL). The assembly of claim 9 wherein said pad and said plate each has four corners, and said coupling includes four projections and four corresponding holes disposed at respective corners of one of said pad and plate.

14. (CURRENTLY AMENDED). A railroad assembly for securing a railroad track on a railroad tie, said railroad assembly comprising:

an abrasion plate having an upper surface, and being constructed and arranged

to fit on the railroad tie;

a rail pad having a lower surface and being constructed and arranged to fit on said abrasion plate with said lower surface facing and contacting said upper surface and to support the rail;

a plurality of clips arranged to secure the rail on top of said rail pad;

a plurality of clip supports supporting said clips and having lateral walls; and

a seal member formed [between] on one of said abrasion plates, rail pad and said clip supports to protect the interface with the tie from extraneous matter.

15. (CURRENTLY AMENDED). The assembly of claim 14 wherein said clip supports penetrate into said tie and wherein said one of said abrasion plate and said rail pad is formed with at least one cutout shaped and sized to fit partially around one of said clip supports, said seal being formed at the interface between the cutout and the anchor.

16. (ORIGINAL). The assembly of claim 15 wherein said seal is formed on said abrasion plate, said abrasion plate being a molded element having a body with a predetermined thickness and a lip having a thickness smaller than said body and forming said seal.

17. (ORIGINAL). The assembly of claim 16 wherein said lip is elastic.

18. (CURRENTLY AMENDED). A method of installing an abrasion assembly to a tie having a worn surface, comprising:

providing an abrasion assembly having a bottom surface formed with a plurality of uniformly dispersed irregularities;

depositing on the tie an uncured epoxy;

positioning said abrasion assembly; and

allowing the epoxy to cure thereby engaging the abrasion assembly by said bottom surface and said irregularities.

19. (ORIGINAL). The method of claim 18 wherein said bottom surface is formed with a plurality of depressions, and wherein said epoxy enters into said depressions when said abrasion assembly is positioned.

20. (ORIGINAL). The method of claim 18 further comprising providing said assembly with depressions arranged in a pattern selected to resist longitudinal and transversal forces after the assembly is secured to the tie by the cured epoxy.

21. (NEW). The assembly of claim 1 wherein said depressions and bumps have vertical heights that are smaller than the thicknesses of said plate and said pad.

22. (NEW). An assembly for supporting a rail on a railroad tie, said assembly comprising:

an abrasion plate having an upper surface, and being constructed and arranged to fit on the railroad tie;

a rail pad having a lower surface and being constructed and arranged to fit on said abrasion plate with said lower surface facing and contacting said upper surface and to support the rail; and

a locking mechanism adapted to prevent movement between said abrasion plate and said railroad pad, said locking mechanism including a plurality of bumps disposed on one of said surfaces and a plurality of matching depressions on the other of said surfaces;

wherein said abrasion plate includes two opposed plate sides formed to wrap around the tie sides:

23. (NEW). The assembly of claim 22 wherein said plate sides each include a flat portion and an angled portion.

24. (NEW). An assembly for supporting a rail on a railroad tie, said assembly comprising:

an abrasion plate having an upper surface, and being constructed and arranged to fit on the railroad tie;

a rail pad physically separate and removable from said plate, and having a lower surface and being constructed and arranged to fit on said abrasion plate with said lower surface facing and contacting said upper surface and to support the rail; and

locking means for preventing lateral movement between said abrasion plate and said railroad pad when a train passes over said rail.

25. (NEW). The assembly of claim 24 wherein said locking mechanism includes a plurality of bumps uniformly distributed on one of said surfaces and a plurality of matching depressions uniformly distributed on the other of said surfaces, each bump being disposed in a corresponding depression.

26. (NEW). A railroad assembly component for supporting a railroad track on a railroad tie, said component comprising:

an abrasion plate having a generally flat body and adapted for placement on the tie;

a rail pad separate from said abrasion plot and disposed on top of said abrasion pad to support the rail; and

coupling means for coupling said abrasion plate and said rail pad, said coupling including a projection dependent on one of said abrasion plate and said rail pad, and a hole adapted to receive and capture said projection and formed on the other of said abrasion plate and said rail pad, said coupling allowing said plate and pad to move with respect to each other at least laterally without separation.

27. (NEW). A railroad assembly component for supporting a railroad track on a railroad tie, said component comprising:

an abrasion plate having a generally flat body and adapted for placement on the tie;

a rail pad arranged to be placed on top of said abrasion pad and to support the rail; and

a coupling adapted to couple said abrasion plate and said rail pad, said coupling including a projection dependent on one of said abrasion plate and said rail pad, and a hole adapted to receive and capture said projection and formed on the other of said abrasion plate and said rail pad;

wherein said projection includes a stalk terminated with a head, said head being bigger than said hole, said stalk having a cross-sectional dimension smaller than the cross-sectional dimension of the hole to allow some lateral play between said plate and said pad.

28. (NEW). The assembly of claim 27 wherein said pad and said plate each has four corners, and said coupling includes four projections and four corresponding holes disposed at respective corners of one of said pad and plate.

29. (NEW). A railroad assembly component for supporting a railroad track on a railroad tie, said component comprising:

an abrasion plate having a generally flat body and adapted for placement on the tie;

a rail pad arranged to be placed on top of said abrasion pad and to support the rail; and

coupling means adapted to couple said abrasion plate and said rail pad, said coupling including a projection dependent on one of said abrasion plate and said rail pad, and a hole adapted to receive and capture said projection and formed on the other of said abrasion plate and said rail pad;

wherein said projection includes a stalk terminated with a head, said head being bigger than said hole, said stalk having a cross-sectional dimension smaller than the cross-sectional dimension of the hole to allow some lateral play between said plate and said pad.

30. (NEW). A railroad assembly for securing a railroad track on a railroad tie, said railroad assembly comprising:

an abrasion plate having an upper surface, and being constructed and arranged to fit on the railroad tie;

a rail pad having a lower surface and being constructed and arranged to fit on said abrasion plate with said lower surface facing and contacting said upper surface and to support the rail;

a plurality of clips arranged to secure the rail on top of said rail pad;

a plurality of clip supports supporting said clips and having lateral walls; and

sealing means formed between said clip supports and one of said abrasion plates and rail pad to protect the interface with the tie from extraneous matter.